

REMARKS

The Office Action mailed April 29, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-3, 6, 7 and 32-35 are now pending in this application. Claims 1-3, 6, 7 and 32-35 stand rejected. Claims 4, 5, and 8-31 have been cancelled.

The objection to the drawings is respectfully traversed. Applicants have amended Figure 4. Accordingly, Applicants respectfully request that the objection to the drawings be withdrawn.

The objection to Claim 35 is respectfully traversed. Applicants have amended Claim 35. Accordingly, Applicants respectfully request that the objection to Claim 35 be withdrawn.

The rejection of Claims 1 and 32 under 35 U.S.C. 102(b) as being anticipated by Poling (U.S. Patent No. 4,351,105) is respectfully traversed.

Poling describes a method of making a control device (11) having an opening (13) with at least a pair of abutments (15, 17). A snap-action member (19) located in opening (13) is operable between a stable configuration and an unstable configuration wherein the snap action member is engaged only in the unstable configuration with the pair of abutments (15, 17). The snap-action member (19) is seated on control device (11) in a predetermined position so as to extend about the opening (13). A spring (117) is interposed between a retainer (119) and a screw (121). Spring (117) urges its retainer (119) toward engagement with switch arm (113) and with lower arcuate surface (33) of snap-action member (19). As snap-action member (19) moves toward its unstable configuration, it drives retainer (119) against the compressive force of spring (117) and affects the pivotal movement of switch arm (113). Notably, Poling does not describe first and second moving contacts including contact fronts with first and second engagement faces which facilitate electrical contact with fixed contacts, the engagement faces substantially equidistant from fixed contacts, minimizing arc length.

Claim 1 recites "a method for restricting travel of a moving contact in a lighting contactor, the lighting contactor including the moving contact and a contact carrier, wherein

the moving contact includes a retaining boss and wherein the contact carrier includes a mounting tab, said method comprising the steps of providing a hollow spacer...providing a biasing member comprising a front end and a rear end...positioning the biasing member within the spacer such that the spacer extends only around the biasing member...and installing the biasing member and the spacer in the contact carrier such that the biasing member front end receives and is mounted on the moving contact retaining boss and the biasing member rear end receives and is mounted on the contact carrier mounting tab.”

Poling does not describe nor suggest the method recited in Claim 1. Specifically, Poling does not describe installing the biasing member and the spacer in the contact carrier such that the biasing member front end receives and is mounted on the moving contact retaining boss and the biasing member rear end receives and is mounted on the contact carrier mounting tab. Rather, and in contrast to the present invention, Poling describes a method of making a snap-action member operable between a stable and an unstable configuration wherein the snap-action member affects the pivotal movement of a switch arm towards an open position. Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Poling.

Claim 32 recites “a method for limiting movement of a moving contact, said method comprising providing a lighting contactor including an access slot, the moving contact, and a contact carrier, wherein the access slot includes a longitudinal axis, the moving contact includes a retaining boss, and the contact carrier includes a mounting tab...providing a spacer with at least one longitudinal opening...and inserting a biasing member through the at least one longitudinal opening of the spacer, such that a biasing member front end receives and is frictionally engaged with the retaining boss and a biasing member rear end receives and is mounted on the mounting tab.”

Poling does not describe nor suggest the method recited in Claim 32. Specifically, Poling does not describe installing the biasing member and the spacer in the contact carrier such that the biasing member front end receives and is mounted on the moving contact retaining boss and the biasing member rear end receives and is mounted on the contact carrier mounting tab. Rather, and in contrast to the present invention, Poling describes a method of making a snap-action member operable between a stable and an unstable configuration wherein the snap-action member affects the pivotal movement of a switch arm towards an

open position. Accordingly, for at least the reasons set forth above, Claim 32 is submitted to be patentable over Poling.

The rejection of Claims 1-3, 6, 7, and 32-34 under 35 U.S.C. 103(a) as being unpatentable over Hirata (U.S. Patent No. 4,063,054) in view of Poling (U.S. Patent No. 4,351,105) is respectfully traversed.

Poling is described above. Hirata describes a key switch equipped with a contact piece. The contact piece is pressed down by a key top (13) actuated by an external force (such as a finger) thereby closing an electric circuit. A key top (13) is included with a downwardly extending protruding part (14) on the bottom thereof, and engages an elastic element, for example a coil spring (15), that surrounds protruding part (14). The remainder of key top (13) is coupled to a central portion (17) of a first plate spring member (16). A peripheral portion (19) of member (16) is placed on an insulating spacer (20). When key top (13) is depressed, protruding portion (14) enters an opening formed in central portion (17) and depresses a central portion (23) of a second plate spring member (22). Spacer (20) limits an amount of travel of spring member (16). Notably, Hirata does not describe nor suggest a spring front end configured to receive and mount on a moving contact retaining boss and a spring rear end configured to receive and mount on a contact carrier mounting tab. Additionally, Hirata does not describe nor suggest that the central portion includes a retaining boss or a mounting tab for a spring.

Claim 1 is recited above. Neither Poling nor Hirata, considered alone or in combination, describe or suggest a method for restricting travel of a moving contact in a lighting contactor, as recited in Claim 1. Specifically, neither Poling nor Hirata describe installing the biasing member and the spacer in the contact carrier such that the biasing member front end receives and is mounted on the moving contact retaining boss and the biasing member rear end receives and is mounted on the contact carrier mounting tab. Rather, and in contrast to the present invention, Poling describes a method of making a snap-action member operable between a stable and an unstable configuration wherein the snap-action member affects the pivotal movement of a switch arm towards an open position. Hirata describes a key top that includes a protruding part configured to extend through a spring, wherein the spring is biased between the key top and the central portion when an external force is applied to the key top. Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Hirata in view of Poling.

Claims 2, 3, 6, and 7 depend, directly, or indirectly, from independent Claim 1. When the recitations of Claims 2, 3, 6, and 7 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2, 3, 6, and 7 are likewise patentable over Hirata in view of Poling.

Claim 32 is recited above. Neither Poling nor Hirata, considered alone or in combination, describe or suggest a method for limiting movement of a moving contact in a moving contact, as recited in Claim 32. Specifically, neither Poling nor Hirata describe installing the biasing member and the spacer in the contact carrier such that the biasing member front end receives and is mounted on the moving contact retaining boss and the biasing member rear end receives and is mounted on the contact carrier mounting tab. Rather, and in contrast to the present invention, Poling describes a method of making a snap-action member operable between a stable and an unstable configuration wherein the snap-action member affects the pivotal movement of a switch arm towards an open position. Hirata describes a key top that includes a protruding part configured to extend through a spring, wherein the spring is biased between the key top and the central portion when an external force is applied to the key top. Accordingly, for at least the reasons set forth above, Claim 32 is submitted to be patentable over Hirata in view of Poling.

Claims 33-34 depend, directly, or indirectly, from independent Claim 32. When the recitations of Claims 33-34 are considered in combination with the recitations of Claim 32, Applicants submit that dependent Claims 33-34 are likewise patentable over Hirata in view of Poling.

For the reasons set forth above, Applicants respectfully request that the 35 U.S.C. 103(a) rejection of Claims 1-3, 6, 7, and 32-34 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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ANNOTATED SHEET



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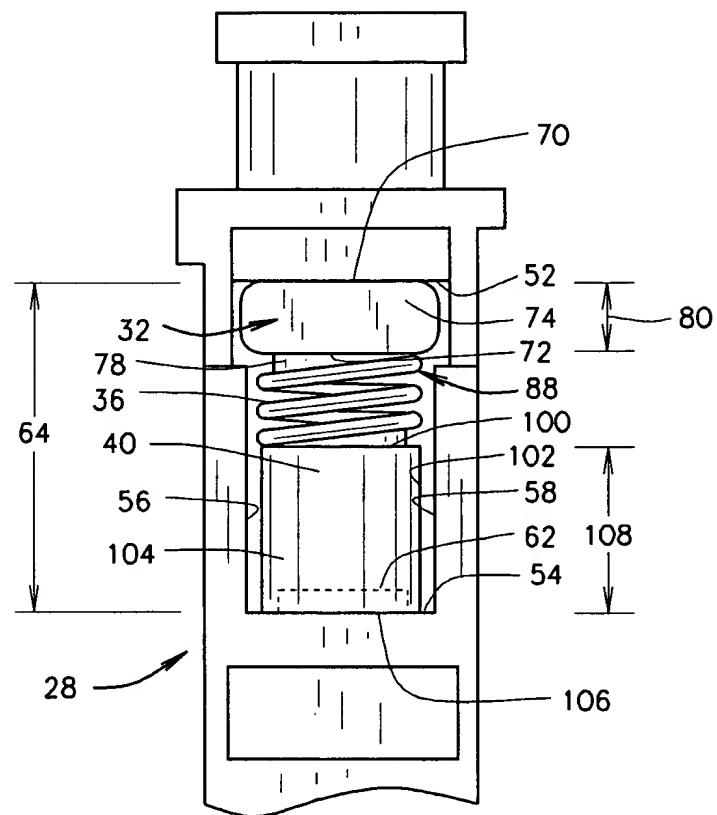


FIG. 3

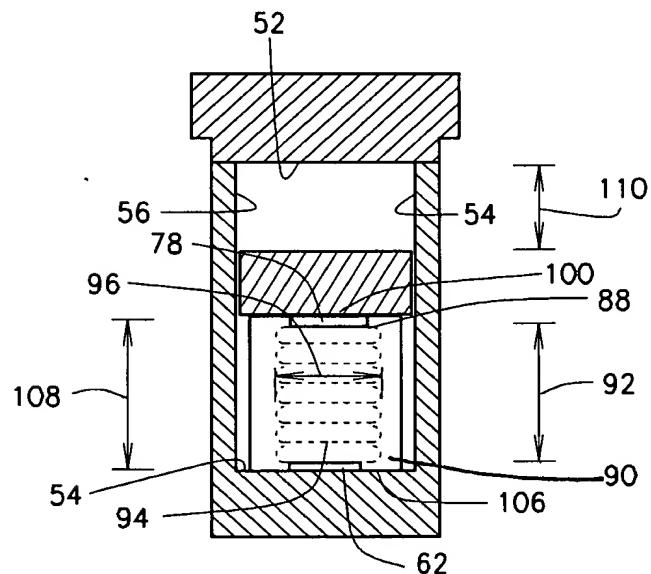


FIG. 4